We claim:

1. A method of performing an intelligent bedcheck of an electronic shelf label (ESL) comprising the steps of:

(a) displaying informational text by the ESL, said ESL including a plurality of registers;

(b) providing an ESL data file stored in a host computer system comprising the intended contents of said plurality of registers;

(c) determining by the host computer system a subset of said plurality of registers containing both said informational text and data controlling the display of said informational text; and

(d) verifying that the intended contents of said subset of the registers matches the actual contents of said subset of registers.

2. The method of claim 1 wherein step (d) comprises the substeps of:

(i) calculating a sumcheck of the intended contents of each of the subset of registers by the host computer; and

(ii) transmitting bedcheck messages to the ESL by the host computer, each bedcheck message including the calculated sumcheck for one of the subset of registers.

3. The method of claim 2 further comprising the substeps of:

(iii) receiving each bedcheck message by the ESL;

(iv) comparing each received sumcheck with a sumcheck calculated using the actual contents of one ESL's registers;

(v) for each received bedcheck message, transmitting a positive acknowledgement message from the ESL to the host computer, if the received sumcheck matches the sumcheck calculated using the actual contents of the ESL's registers; and

(vi) for each received bedcheck message, transmitting a negative acknowledgment message to the ESL computer, if the received sumcheck does not match the sumcheck calculated using the actual contents of the ESL's registers.

4. The method of claim 3 further comprising the substep of:

(vii) transmitting at least one message to the ESL updating the ESL's registers with the data contained in the ESL data file, if a negative acknowledgement is received by the host computer.

5. The method of claim 3 further comprising the substep of:

(vii) taking corrective action if a negative acknowledgement is received by the host computer, or if no acknowledgement is received.

6. An electronic shelf label (ESL) system comprising:

an ESL including a plurality of registers and a display displaying informational text; and

a host computer including an ESL data file comprising the intended contents of said plurality of registers, the host computer determining a subset of said plurality of registers containing both said informational text and data controlling the display of said informational text, said host computer communicating with the ESL to verify that the intended contents of said subset of the registers matches the actual contents of said subset of registers.

7. The ESL system of claim 6 wherein the host computer calculates a sumcheck of the intended contents of each of the subset of registers, and transmits bedcheck messages to the ESL by the host computer, each bedcheck message including the calculated sumcheck for one of the subset of registers.

8. The ESL system of claim 7 wherein the ESL receives each bedcheck message and compares each received sumcheck with a sumcheck calculated using the actual contents of one ESL's registers.

9. The ESL system of claim 8 wherein, for each received bedcheck message, the ESL transmits a positive acknowledgement message from the ESL to the host computer, if the received sumcheck matches the sumcheck calculated using the actual contents of the ESL's registers.

10. The ESL system of claim 9 wherein, for each received bedcheck message, the ESL transmits a negative acknowledgment message to the host computer, if the received sumcheck does not match the sumcheck calculated using the actual contents of the ESL's registers.